Appl. No. 09/187,358
Amdt. dated July 2, 2003
Reply to Office action of June 5, 2002

This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims

Claim 1 (currently amended): A conveyor for elongate components (12) designed with a head (41) and a shank (42), with a feed arrangement (7), for feeding the components in a prescribed direction~~, comprising a transfer arrangement (8) with a transfer region (15) into which the elongate components (12) are fed from~~ through a feed duct (11) comprising a head guiding duct (13) having a feed path for the heads (41) with the head guiding duct (13) being located in a head duct plane, and a shank guiding duct (14) with the ducts (13) and (14) being in communication with a conveying duct (16) into which the components (12) can be moved from the ~~transfer region (15),~~ feed duct (11), the conveying duct (16) having a prescribed location in the head duct plane into which the head (41) of each component (12) is moved from the head guiding duct (13) and positioned in the prescribed location, characterized ~~by the transfer arrangement (8) which comprises~~ in that:

at least one catch element (18) being located externally of the ~~transfer region (15)~~ conveying duct (16) and extending along, and adjacent, the head guiding duct (13) generally in the prescribed direction of the feeding of the elongate components (12);

at least one portion (21) of the at least one catch element (18) being removably extendable into and out of the feed path of the head guiding duct (13) and being located externally of the prescribed location;

a biasing element (39) positioned to normally urge the at least one portion (21) of the at least one catch element (18) movably into the feed path of the head guiding duct (13) for engagement with the elongate components (12) being fed therethrough; and

the at least one catch element (18) and the at least one portion (21) thereof being mounted for deflected movement out of the feed path of the head guiding duct (13), while remaining externally of the prescribed location, against the normal urging of the biasing element (39) upon engagement with each of the elongate components (12) being fed through the feed path of the head guiding duct (13) to allow continued feeding of the elongate components (12) through and out of the feed path and into the prescribed location.

Claim 2 (currently amended): The conveyor according to claim 1, characterized in that the at least one catch element (18) has a locking face (22) facing at least partially the ~~transfer region (15)~~ prescribed location to prevent any elongate component (12), which has passed into the ~~transfer region (15)~~ prescribed location, from slipping therefrom.

Claims 3-6 (canceled)

Claim 7 (previously amended): The conveyor according to claim 1, characterized in that the at least one catch element (18) is movable pivotally around an axis (38) and the biasing element (39) acts on, and allows movement of, the at least one catch element from the feed path upon engagement with the elongate components (12) passing through the feed path.

Claim 8 (previously amended): The conveyor according to claim 7, characterized in that the biasing element (39) is a compression spring, the at least one catch element (18) is formed with the at least one portion (21), which is a first end, and a second end (48), and the axis (38) is located at an intermediate portion of the at least one catch element between the first end and the second end thereof, and the compression spring is arranged to engage the at least one catch element (18) between the axis (38) and the first end of the at least one catch element.

Claim 9 (currently amended): The conveyor according to claim 1, characterized in that the ~~transfer arrangement (8)~~ conveyor further comprises two relatively displaceable positioning segments (9, 10), the positioning segments (9, 10) defining a recess (24) through which a component (12) can be introduced into the prescribed location of the conveying duct (16).

Claim 10 (currently amended): The conveyor according to claim 9, characterized in that the ~~transfer arrangement (8)~~ conveyor further comprises biasing elements (27, 28) for urging respectively the positioning segments (9, 10) together and allowing displacement thereof against the urging of the biasing elements (27, 28).

Claim 11 (previously amended): The conveyor according to claim 9, characterized in that each positioning segment (9,10) is pivotal round a respective pivot axis (25,26).

Claim 12 (previously amended): The conveyor according to claim 9, characterized in that the positioning segments (9,10) have a form substantially corresponding to the cross section of the feed duct (11).

Claim 13 (currently amended): The conveyor according to claim 9, characterized in that the positioning segments (9, 10) are structured to form a continuation of the feed duct (11) between at least the feed duct (11) and the ~~transfer region (15)~~ prescribed location.

Claim 14 (currently amended): The conveyor according to claims 1 or 9, characterized in that the conveying duct (16) is formed by a split sleeve (31) which comprises a first end portion (34) adjacent the ~~transfer region (15)~~ prescribed location and a second end portion (35) remote from the ~~transfer region (15)~~ prescribed location an at least one resilient element (36) is arranged on the second end portion (35), the cross section of the conveying duct (16) tapering conically substantially from the first end portion (34) to the second end portion (35) and being enlargeable against the action of the element (36).

Claim 15 (previously amended): The conveyor according to claim 1, characterized in that the at least one portion (21) is a first end portion (21) of the at least one catch element (18), and which further comprises:

a second end portion (48) of the at least one catch element (18), which is remote from the first end portion (21);

a stop surface (49) positioned for engagement with the second end portion (48) of the at least one catch element (18); and

the biasing element (39) normally urging the second end portion (48) into engagement with the stop surface (49) to limit the distance in which the first end portion (21) is urged into the feed path of the head guiding duct (13).